

CLAIMS

WHAT IS CLAIMED IS:



1. A piston support for an axially extending driving piston (8) in a setting tool, wherein said piston (8) comprises a leading end for driving an element from the setting tool and opposite trailing end, said piston (8) having an axially extending cylindrical section (10a) closer to the leading end and axially extending from said cylindrical section (10a) towards the trailing end of said piston (8), a wedge-shaped section (10b) having a wedge surface (18) being inclined inwardly towards said piston axis (16) in the direction towards the trailing end of said piston (8), said piston (8) is located within an axially extending piston guide (5) having a leading end and an axially spaced trailing end, said piston (8) having a ready-to-fire position within said piston guide (5) and being displaced from the ready-to-fire position towards the leading end of said piston guide when the setting tool is fired, at least one braking element (23) mounted in said piston guide (5) in the region of the ready-to-fire position in pressure contact with said cylindrical section (10a) and the pressure contact reduces as said piston (8) moves towards the leading end of said piston guide (5) and said braking element is located opposite said wedge surface (18).
2. A piston support, as set forth in Claim 1, wherein said wedge surface (18) is an axially extending conically shaped surface.

3. A piston support, according to Claim 1, wherein said the braking element (23) is one of a ball, roller, cylinder, or plate.

4. A piston support, as set forth in Claim 3, wherein said braking element (23) is seated in a recess (19) extending radially outwardly in said piston guide (5) and means in said piston guide biasing said braking element (23) inwardly towards said driving piston (8).

5. A piston support, as set forth in claim 4, wherein said recess (19) has a base (22) spaced radially outwardly from said piston (8) and expending generally in the axial direction of said piston, said base inclined relative to the axis of said piston outwardly towards the trailing end of said piston, and said means biasing said braking element towards the leading end of said piston in the direction of a wall (20) of said recess (19) extending perpendicular to said piston axis and closer to the leading end of said piston guide.

6. A piston support, as set forth in claim 1, wherein said braking element is an elastic element at least radially of said piston (8).

7. A piston support, as set forth in claim 5, wherein said base (22) of said recess (19) is one of elastic and resilient.

8. A piston support, as set forth in claim 1, wherein a plurality of said braking elements (23) are positioned in said piston guide (5) equiangularly spaced apart around said piston (8) oppositely to said wedge surface (18).

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R1 9. A piston support, as set forth in claim 1, wherein said means comprises an axially expending compression spring